Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

Compliance Schedules

Pursuant to IDAPA 58.01.02.400.03, DEQ may authorize compliance schedules for water quality–based effluent limits issued in a permit for the first time. Sandpoint WWTP cannot immediately achieve compliance with the effluent limits for ammonia and phosphorus; therefore, DEQ authorizes a compliance schedule and interim requirements as set forth below. This compliance schedule provides the permittee a reasonable amount of time to achieve the final effluent limits as specified in the permit. At the same time, the schedule ensures that compliance with the final effluent limits is accomplished as soon as possible. At the request of the City of Sandpoint, this schedule includes two options, one that utilizes their existing treatment plant and the other which allows time for the construction of a new treatment plant.

Requirements for Compliance Schedule Option 1 and 2

1. The permittee must comply with all effluent limitations and monitoring requirements in Part I.B., I.C. and I.D. beginning on the effective date of the permit, except those for which a compliance schedule is specified in Part I.C of the final permit.

2. The permittee must achieve compliance with the applicable final effluent limitations as set forth in Part I.B. (Table 1) of the permit not later than:

    a. Five (5) years after the effective date of the final permit for Option 1, or
    b. Ten (10) years after the effective date of the final permit for Option 2.

3. While the schedules of compliance specified in Part I.? of the permit are in effect, the permittee must complete interim requirements and meet interim effluent limits and monitoring requirements as specified in Parts I.B, I.C and I.D of the permit.

4. By one (1) year after the effective date of the final permit, the permittee must notify EPA and DEQ in writing that a preferred compliance schedule option has been selected and demonstrate that funding for the preferred option is secured for Option 1 or has a City of Sandpoint approved plan for obtaining funding for Option 2.

Option 1 Existing Plant Upgrades – 5 Year Schedule

This option applies if the City of Sandpoint decides to upgrade their existing treatment plant to meet final effluent limits.

1. By three (3) years after the effective date of the final permit, the permittee must provide for DEQ approval, a preliminary engineering report (PER) that examines how to improve effluent quality and meet effluent limits associated with phosphorus and ammonia. This report must include details on how the proposed improvements will meet final effluent limits. The report shall include materials, costs, and a schedule for completion of the work.

2. By four (4) years after the effective date of the final permit, final plans and specifications for the modifications proposed in the PER shall be submitted to DEQ for approval.

3. By five (5) years after the effective date of the final permit, the permittee must have completed the plant upgrade and achieved compliance with final effluent limits and WQS as shown in Table 3.

Option 2 New Treatment Plant – 10 Year Schedule

This option applies if the City of Sandpoint decides to construct a new treatment plant that will meet final effluent limits.

Interim Requirements for Option 2 Compliance Schedule

1. By three (3) years after the effective date of the final permit a facility plan shall be submitted to DEQ for review and approval. The facility plan shall include outlining estimated costs and schedules for construction of a new wastewater treatment plant and implementation of technologies to achieve final effluent limitations. This schedule must include a timeline for pilot testing.

2. By four (4) years after the effective date of the final permit, the permittee must provide EPA and DEQ with a progress report on funding for the new facility. Copy of notice of bond approval or notice of judicial confirmation is acceptable.

3. By five (5) years after the effective date of the final permit, the permittee must provide EPA and DEQ with written notice that design has been completed and approved by DEQ.

4. By six (6) years after the effective date of the final permit, the permittee must provide EPA and DEQ with a notice that bids for construction have been awarded to achieve final effluent limitations.

5. By seven (7) and eight (8) years after the effective date of the final permit, the permittee must provide EPA and DEQ with brief progress reports of construction as they relate to meeting the compliance schedule timeline.

6. By nine (9) years after the effective date of the final permit, the permittee must provide EPA and DEQ with written notice that construction has been substantively completed on the facilities to achieve final effluent limitations.

7. By ten (10) years after the effective date of the final permit, the permittee must provide EPA and DEQ with a written report providing details of a completed start up and optimization phase of the new treatment system and must achieve compliance with the final effluent limitations of Part I.B.

Table 2. Interim Limits for Both Options				
Parameter	Units	Average Monthly Limit	Average Weekly Limit	Mixing Zone
Phosphorus	lb/day	96	125	60%
Ammonia	mg/L	effluent limit based on max DMR value from 6-20-10 through 7-31-15 of 32.8	What percent mixing zone will this interim limit require?	??
	lb/day			

Table 3. Final Limits for Both Options				
Parameter	Units	Average Monthly Limit	Average Weekly Limit	Percent Mixing Zone
Phosphorus (June-September)	lb/day	61	79	47% of the 30Q10 flow (6,640 cfs)
Phosphorus (October-May)	lb/day	96	125	60% of the 30Q10 flow (8,260 cfs)
Ammonia	mg/L	21.1	Max Daily Limits 40.5	25%
	lb/day	880	1689	

Mixing Zones

Due to Sandpoint's desire for a design flow increase, DEQ and EPA modeled various scenarios related to the phosphorus mixing zone and downstream conditions in the Pend Oreille River; and EPA did additional modeling to examine the acute and chronic mixing zones for ammonia, chlorine and mercury. These modeling efforts resulted in more stringent limits for phosphorus, ammonia and chlorine. The mixing zones for these pollutants and the rationale behind their use are described in detail in the modeling documentation and reports available from DEQ upon request. Pursuant to IDAPA 58.01.02.060, DEQ authorizes the mixing zones summarized in Table 4 for the current outfall location.

Table 4: Mixing Zones

Pollutant	Mixing Zone (% of critical flow volumes of the Pend Oreille River)
Ammonia	25%
arsenic	25%
chlorine	25%
chromium III	25%
chromium IV	25%
copper	25%
cyanide	25%
lead	25%
mercury	25%
nitrate + nitrite	25%
zinc	25%
Phosphorus, June-September interim limit	60%
Phosphorus, June-September final limit	47%
Phosphorus, October-May	60%